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"RESPONSE UNDER 37 CFR 1.116-  
EXPEDITED PROCEDURE EXAMINING  
GROUP 3700"

IN THE UNITED STATES PATENT & TRADEMARK OFFICE

IN RE APPLICATION OF:

MARIO P. MORETTI : GROUP ART UNIT: 3728

SERIAL NO: 09/765,605 :

FILED: JANUARY 22, 2001 : EXAMINER: STASHICK, A.

FOR: WATERPROOFED VAPOR-  
PERMEABLE SOLE FOR SHOES

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REQUEST FOR RECONSIDERATION

ASSISTANT COMMISSIONER FOR PATENTS  
WASHINGTON, D.C. 20231

SIR:

In response to the Office Action dated April 19, 2002, Applicant requests the reconsideration of the final rejection of Claims 1-8 for the reasons set forth below.

Claims 1 and 3-8 stand rejected under 35 U.S.C. § 103 as being obvious over a combination of four separate references: U.S. Patent 4,100,685 to Dassler in view of U.S. Patent 4,771,555 to Ohashi, as well as U.S. Patent 5,983,524 to Polegato and U.S. Patent 6,282,813 to Squadroni. The Examiner there recognized that the primary reference to Dassler "does not teach the tread being made of leather," does not teach the tread being "at least partially covered in an upward region by a membrane that is permeable to vapor and impermeable to water," does not teach a tread at least partially covered in an upward region by a membrane that is "sealed in the peripheral regions with respect to the tread," does not teach "details with respect to the membrane," does not teach "a protective layer used to protect the membrane, the undercuts in the inserts; and the inserts assembled by injection molding." The Examiner has therefore relied upon Ohashi to teach "that inserts used to

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ventilate a shoe can be made of plastic." Moreover, the Examiner has relied upon Squadroni to suggest forming the elastomeric sole of Dassler from leather, and has relied upon Polegato to teach covering an upward region of the shoe sole by a material which is permeable to vapor and impermeable to water. However, Applicants respectfully submit that the Examiner has failed to adequately set forth motivations which would adequately support the multiple modifications of the prior art which are necessary to provide the claimed invention.

As is described in the specification, the invention is directed to a problem which is specific to shoes with leather soles: the leather absorbs moisture and so becomes impregnated with water which can wet the user's foot (page 1, lines 8-12). Thus, the motivation for the present invention stems from the absorption of water by leather, as opposed to waterproof elastomeric sole materials.

In accordance with the invention, the *leather* tread of the shoe is therefore covered in an upward region by a membrane made of a material which is permeable to vapor but impermeable to water, and which is sealed in the peripheral regions thereof with respect to the tread. Referring to the non-limiting example of the figures, the leather tread 11 is thus covered by the air permeable but water impermeable membrane 12 which is sealed by the peripheral trim 13 about its periphery. Water vapor can thus pass outward from the foot through the membrane 12, but water absorbed in the leather tread 11 is not allowed to penetrate the membrane 12 and wet the foot.

Moreover, in order to better remove the water vapor which has passed through the membrane 12, through holes extending entirely through the thickness of the tread include inserts 15 made of a plastic material ("plastic" here being used to refer to any rubber-like elastomer) assembled in the through holes, the inserts themselves having through holes 16 to

allow passage of the vapor. The inserts will simultaneously provide anti-slip characteristics to the sole (page 4, lines 24-28).

As an initial matter, Applicant notes that the outer layer of the sole in Dassler is formed from a molded part 5 made of plastic such as polyurethane. Thus, the sole in Dassler is not formed of leather or a similar material which absorbs moisture and requires an additional water barrier. **The sole 5 is itself a water barrier, and so the water impregnation problem noted above would not arise therein.**

As the Examiner has recognized, Dassler provides through holes with "inserts" 9. However, the holes 8 are air vents are designed to permit air ventilation of the foot (column 2, lines 8-16). Moreover, the "inserts" 9 of Dassler are merely filter inserts which prevent the penetration of dirt particles into the interior of the shoe without detracting from the desired ventilation (column 3, lines 45-48).

Thus, those skilled in the art would not have been motivated to add a water impermeable layer onto the sole 5 of Dassler, both because the sole 5 is already water impermeable, and also because this would interfere with the desired air ventilation, even if the material of the water impermeable layer were nominally air permeable (even an air permeable, water impermeable layer will provide a considerable resistance to air circulation as compared to unrestricted through holes).

Of course, Squadroni discloses that shoe soles having air vent holes could be formed of leather as well as rubber, but this begs the question of whether it would have been obvious for those skilled in the art to have formed the sole 5 of Dassler from leather. While Squadroni discloses that the ventilated sole thereof *could* be made of leather, it also discloses that it is "most preferably" formed of rubber (column 2, lines 66-67). **Thus, the teaching which Squadroni provides to those skilled in the art is that soles requiring ventilation**

**are preferably formed of rubber.** This would certainly not provide a motivation for those skilled in the art to modify a **rubber** sole to be leather.

Nor can the suggestion for forming the sole of a ventilated shoe having a gas permeable layer from leather be drawn from Polegato, since the tread layer 13 of Polegato is made of an elastomer. Finally, Applicant recognizes that Ohashi teaches plastic inserts, but only in a ski boot having a hard plastic shell. There is no reason why those skilled in the art would have been motivated by the presence of plastic inserts in a plastic shell to include plastic inserts for the ventilation holes of a leather sole.

In summary, Applicants respectfully submit that the Examiner has failed to put forth a credible motivation for those skilled in the art to have combined the four references applied in the rejection in the manner set forth, while utilizing a leather sole. The problem to be solved by the invention is one which is characteristic of leather soles and is not fairly taught by any of the references. Indeed, the only mention of leather in the cited references is found in Squadroni, and Squadroni teaches those skilled in the art that leather is a *less desirable* material than is rubber. It is therefore evident that any motivation for the combination of references set forth in the outstanding rejection comes from hindsight, and not from the fair reading of what would have been obvious to those skilled in the art at the time of invention.

Claims 1-8 were also rejected under 35 U.S.C. § 103 as being obvious over Margolin (U.S. Patent 2,347,207) in view of Simmons (U.S. Patent 4,682,425) in view of Polegato. Here again, the Examiner has recognized that the primary reference (Margolin) has numerous shortcomings, including that it "does not teach that the sole can be made of leather, a vapor permeable layer located on the upward sole region, the details of this membrane, a protective layer located on the membrane and the tread being injection molded." Indeed, Margolin is further deficient in that it does not disclose a leather tread having "through holes extending

entirely through the thickness of said tread." Instead, Margolin merely discloses that the leather sole can have a single opening which houses a resilient insert body 11, in which the insert body 11 has the ventilation holes at 18.

Simmons was cited to teach that "a shoe insole can be made of leather." However, while this teaches that a shoe insole "may" be made of leather, it provides no motivation for those skilled in the art to fashion the insert 11 of Margolin from leather, i.e., it provides no motivation for the specific modification proposed by the Examiner. Margolin teaches that the insert 11 should be made of a resilient material which can be compressed during walking to force air through the openings (column 1, lines 32-54). **The use of non-resilient leather would be inconsistent with this goal.** Thus, despite the fact that Simmons might teach the existence of leather insoles, *per se*, the modification of Margolin to use a leather insole would be contrary to the explicit teachings thereof and so would not have been obvious to those skilled in the art. Thus, whatever teaching Polegato may provide with respect to the use of an air permeable but liquid impermeable layer, no combination of the above references would teach or suggest the claimed feature whereby a tread "made of leather includes through holes, inserts and a membrane made of a material which is permeable to vapor but impermeable to water. Applicant therefore respectfully submits that no combination of the above references, which would have been obvious at the time of invention would have taught or suggest the claimed subject matter.

Applicant therefore believes that the present application is in a condition for allowance and respectfully solicits an early Notice of Allowability.

Respectfully submitted,

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